

## **APPENDIX 12**

Pueblo of Isleta Responsiveness Summary for 2001 PIWQS revisions.

## RESPONSIVENESS SUMMARY

Technical comments were received in writing, or verbally at the 24 July 2001 Public Hearing, on proposed amendments to the PUEBLO OF ISLETA Surface Water Quality Standards. The following summary provides our responses to these proposals.

### Section I.

1. EPA - Suggestion 1.a. - Page 1, Subpart A., 2<sup>nd</sup> ¶. Language on EPA's written proposal was marginally modified by Diane Evans during discussions held immediately after the 24 July 2001 Public Hearing. Her suggested language [". . . and other provisions . . ."] was incorporated *in toto*.
2. EPA - Suggestion 1.b. - Page 1, Subpart A., 2<sup>nd</sup> ¶. Comment is duly noted - no changes to the proposal were requested or made.
3. EPA - Suggestion 2. - Page 2, Subpart D. Comment is duly noted - after additional consideration no changes to the proposal were made.
4. EPA - Suggestion 3. - Page 2, Subpart H. Comment is duly noted although the EPA's recommendation is not accepted and not adopted. The PUEBLO OF ISLETA believes that attaining one of the federal Clean Water Act's [33 U.S.C.A. §§ 1251 *et seq.*] stated goals of ". . . water quality which provides for the protection of fish, shellfish, and wildlife . . ." [§ 1251 (a)(2)] requires the implementation of these criteria under all flow conditions. We believe that attainment of these criteria is especially important when aquatic biota are impacted by habitat limitations resulting from low-flow conditions. Moreover, such low-flow periods historically coincide with high temperatures and low dissolved oxygen concentrations which are already causing significant stresses on the aquatic organisms.
5. Albuquerque - Suggestion 2 - Page 2, Subpart H. Comment is noted however, for the reasons described above (EPA Suggestion 3), the suggestion has not been implemented.
6. NMED - Item # 1 - Page 2, Subpart H. The "Guaranteed Minimum Flow" concept is unique to the New Mexico Surface Water Quality Standards and, as such, is of no immediate benefit to the PUEBLO OF ISLETA. Moreover, the sole such guarantee in the State of New Mexico has, or is about to, expire and we have been informed that it will not be extended.
7. EPA - Suggestion 4. - Page 2, Subpart J. Concur with EPA's proposal. See amended language.

### Section II.

8. NMED - Suggestion 2 - Page 4, Subsection B.5. - Concur - see amended language.

9. NMED - Suggestion 3 - Page 5, Subsection B.14. - Concur - see amended language
10. NMED - Suggestion 4 - Page 5, Subsection B.15. - Concur - see amended language
11. EPA - Suggestion 5.a. - Page 6, Antidegradation Review Scheme. Concur - see amended language in first decision box.
12. NMED - Suggestion 5 - Page 6, Antidegradation Review Scheme. Concur - See amended language in second 'question box' while the original third 'question box' has been eliminated.
13. EPA - Suggestion 5.b. - Page 6, Antidegradation Review Scheme. Concur - see amended language in second decision box.

### **Section III.**

14. USFWS - Suggestion 4 - Page 8, Subpart H. We note the concern but believe that the language in this subsection adequately addresses the issue.
15. EPA - Suggestion 6. - Page 8, Subpart I. Comment is duly noted - no changes to the proposal were requested or made.
16. EPA - Suggestion 7.a. - Page 9, Subpart N.1. Concur - toxicity testing references have been corrected.
17. EPA - Suggestion 7.b. - Page 9, Subpart N.1. Concur - a procedure for calculating non-accumulative pollutants has been added.
18. USFWS - Suggestion 5 - Page 9, Subpart P. After reviewing this issue, we found that the USEPA has not yet fully addressed this issue [c.f., EPA's contaminated sediment management strategy. USEPA 1998. EPA-823-R-98-001.] The USFWS proposal seems to include criteria for pollutants which may well be bound to bottom sediments in forms which are not biologically available. The Pueblo, however, recognizes that sediment may actually serve as a source of certain persistent pollutant and as such could be of concern. We have, therefore, developed a general standard applicable to all tribal waters while this issue is further explored and EPA guidance is developed.

### **Section IV.**

19. EPA - Suggestion 8. - Page 10, Subparts A.4., B.4. and C.4. Comment is duly noted although the 30-day averaging period for chronic ammonia criteria is not adopted. Long-term chemical stresses may lead to adverse biotic impacts.

20. NMED - Suggestion 6 - Page 10, Subparts A.4., B.4. and C.4. Concur - see amended language.
21. EPA - Suggestion 9.a. - Page 11, Subpart D.1. Concur - see changes in referenced bacteria criteria.
22. Albuquerque - Suggestion 3. - Page 10, Subpart D.1. and Page 12, Subpart E.1. Although *E. coli* remains the biological indicator of choice, the numeric criteria have been amended as recommended by the U.S. Environmental Protection Agency.
23. AMAFCA - Suggestion 1 - Page 11, Subsection D. AMAFCA's proposal has been carefully reviewed but cannot be implemented. Tribal cultural and recreational usages of its waters occurs throughout the year although a significant percentage of such use occurs during the regions 'monsoon' season. EPA's water quality standards regulations explicitly states: ". . . States must adopt those water quality criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use . . . ." [40 CFR 131.11 (a)(1), emphasis added]. Consequently, the Pueblo must adopt, and implement criteria that protects human health from the effects of biologically contaminated waters.
24. EPA - Suggestion 9.b. - Page 11, Subpart D.1. Concur - see new footnote # 3 at bottom of page 11.
25. EPA - Suggestion 9.c. - Site specific turbidity standard - removal thereof. EPA states that the 25 NTU criterion should be maintained. The PUEBLO OF ISLETA cannot accept this proposal and has provided EPA with 4 separate data sets gleaned from their STORET system which clearly documents elevated turbidity upstream of, and on, the Pueblo. We also note that all waters on the Pueblo are protected from anthropomorphic increases in turbidity by General Standard G. (page 7.) The Pueblo has already committed to monitoring turbidity in its waters as required to determine if a more protective numeric turbidity criterion is necessary.
26. EPA - Suggestion 9.d. - Page 11, Subpart D.3. - Concur - see amended criterion for these five pollutants.
27. EPA - Suggestion 9.e. - Page 11, Subpart D.3. - Concur - see amended cyanide description.
28. Albuquerque - Suggestion 4 - Page 11, Subpart D.3. and Appendix II, Page 23 - Cyanide criterion. Comment noted however we believe that their proposal cannot be implemented. The U.S. Environmental Protection Agency noted in their comments (EPA Suggestion 9.e. above) that the only two forms of cyanide with approved analytical methodologies were for the "total" and "amenable to chlorination." Consequently, the Pueblo has chosen to standardize its regulatory oversight on the "amenable to chlorination" form.
29. EPA - Suggestion 10 - Page 12, Subpart E.1. - Concur - see amended language.



30. EPA - Suggestion 11 - Secondary Contact Recreation Use - deletion thereof. Comment is duly noted - no changes to the proposal were requested or made.
31. EPA - Suggestion 12.a., Subpart F.- Agricultural Water Supply Usage - removal of bacterial standard. Comment is duly noted - no changes to the proposal were requested or made.
32. Albuquerque - Suggestion 6 - Page 12, Subpart F. Comment is noted - no changes to the proposal were made. Two May 2001 reports by Jule Klotter in the Townsend Letter for Doctors and Patients indicates that fluoride concentrations at these levels are, in fact, deleterious. In the first report entitled "Neurotoxicity and Fluoride" <sup>1</sup> is the following statement: "... A 1998 study by J.A. Varner and colleagues found that rats whose drinking water contained fluoride (1 ppm) had compromised blood brain barriers that permitted more aluminum to enter the brain. ... Two studies by Luke (1994 and 1998) showed that fluoride accumulates in the pineal glands of animals and of humans, depressing melatonin production. ..."

The second article by the same author was entitled "Union of EPA Professionals Opposes Fluoridation (Environmental Protection Agency.)" <sup>2</sup> And raises additional concerns. Verbiage in this report indicates that: "... A two-year study conducted by the National Toxicology Program (NTP), using rats and mice, linked sodium fluoride in drinking water to osteosarcoma (bone cancer). ..." The report continues: "... animal studies have shown that a prenatal exposure to fluoride can result in hyperactive behavior. Fluoride also has adverse effects on the pineal gland, the brain, and kidneys - - even at the 'optimal' dosage of one part per million." Frighteningly, the report also states that: "... The positive result of that study (in which malignancies in tissues other than bone were also observed), particularly in male rats, is convergent with a host of data from tests showing fluoride's ability to cause mutations (a principal 'trigger' mechanism for inducing a cell to become cancerous) ... and data showing increases in osteosarcomas in young men in New Jersey, Washington and Iowa based on their drinking fluoridated water. ..."

The PUEBLO OF ISLETA must conclude that at least some of EPA's senior scientific staff are of the opinion that fluoride, even at relatively low levels, is a threat to both non-human mammals as well as to humans.

33. EPA - Suggestion 12.b. - Page 12, Subpart F. Concur - see corrected typographical error.
34. USFWS - Suggestion 3 and Suggestion 6 - Page 12, Subpart I., Page 13, Section V. Subparts A.1.f., and B.1.g. and Page 14 - Section V. C.1.g. The USFWS is correct that one of the goals of a surface water quality program is the protection of non-aquatic wildlife. Historically, the Pueblo has not specifically provided for such protective criteria although

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<sup>1</sup> [WWW.findarticles.com/cf\\_0/m0ISW/2001\\_May/7395306](http://WWW.findarticles.com/cf_0/m0ISW/2001_May/7395306)

<sup>2</sup> [WWW.findarticles.com/cf\\_0/m01SW/2001\\_May/73959308](http://WWW.findarticles.com/cf_0/m01SW/2001_May/73959308)

some benefit is derived from standards intended to protect other designated uses. In response to this proposal, the PUEBLO OF ISLETA has adopted the numeric criterion developed to protect wildlife developed during the Great Lakes Initiative (see Table D-1 to Appendix D to 40 CFR 132) for those pollutants which have been identified in waters of the Middle Rio Grande. The sole exception is the adoption of the selenium criterion proposed by the USFWS itself.

#### **Section V.**

- 35. EPA - Suggestion 13. Comment is noted - no changes to the proposal were requested or made.

#### **Section VI.**

- 36. EPA - Suggestion 14. - Page 15, Subpart A. Concur - see amended language.
- 37. NMED - Suggestion 7 - Page 15, Subpart B. Concur - see amended language.

#### **Section VII.**

- 38. EPA - Suggestion 15. - Page 16 - "Attainable Use" definition. Concur - original language is retained in addition to the "federal" definition."
- 39. NMED - Suggestion 8 - Page 16 - "Attainable Use" definition. Comment is noted - due to EPA's suggestion described above, the original language is retained although the "federal definition" is also included.
- 40. NMED - Suggestion 9 - Page 17 - "Aquatic life" definition - Concur - defined as being synonymous to "Aquatic biota".
- 41. USFWS - Suggestion 2 - Page 9 - Definition of "Aquatic biota/Aquatic life" - changes in this definition coupled with new language in the definitions of "Coldwater fishery" (page 16) and "Warmwater fishery" (page 18) accomplish, in general terms, the USFWS goals.
- 42. EPA - Suggestion 16. - Page 17 - "Fecal Coliform Bacteria" definition. Concur - original language was reinstated.
- 43. NMED - Suggestion 10 - Page 18 - "Fishery" definition and Section IV. Subparts A., B., and C. on page 10. Concur - descriptions of "fisheries" have been significantly broadened by including the entire aquatic community. The "fishery" definition has similarly been broadened.



44. USFWS - Suggestion 1 - Page 18. Concur - see amended definition.

#### **Appendix I.**

45. EPA - Suggestions 17.a. and b. - Page 20. Concur - see amended criteria for di- and tri-chlorophenols.
46. EPA - Suggestion 17.c. - Page 20. Concur - 3-chlorophenol has been added.

#### **Appendix II.**

47. EPA - Suggestion 18. - Information provided by EPA resulted in the addition of 3 phthlate compounds (page 24), benzene, dichlorobenzene and trichlorobenzene (page 26), bromoform, chlorodibromomethane, dichlorobromomethane, dichloroethane, methylene chloride and trichloroethyne (page 27) to the list of regulated substances.
48. EPA - Suggestion 19 - Page 21. Comment is duly noted although no changes have been made to proposal. Language in EPA's Water Quality Standards Regulations [40 CFR § 131.10 (b)] require the Pueblo to protect the standards of downstream states. The State of New Mexico has adopted a Chronic Aquatic Criterion for aluminum of 87  $\mu\text{G/L}$ . Moreover, EPA's own "National Recommended Water Quality Criteria - Correction" [EPA 822-Z-99-001] lists a recommended criterion for aluminum of 87  $\mu\text{G/L}$ .
49. NMED - Comment 11 - Page 21 - Chronic Aluminum criterion. See response to EPA Suggestion 19 immediately above.
50. Albuquerque - Suggestion 1, Page 21, Arsenic criterion for Human Health. Comment is duly noted, however the proposed criterion is based on the most current and comprehensive information available for the Middle Rio Grande valley. If new data were to become available, data from investigations which avoid "flawed results," the Pueblo would be willing to review and, if appropriate, use such data to amend its arsenic criterion.
51. EPA - Suggestion 20. - Page 21. Comment is duly noted. Subsequent discussions with EPA's staff indicate that they would accept the arsenic proposal even in the absence of amendments to other human health criteria. Consequently, the PUEBLO OF ISLETA has retained its original language for these criteria.
52. EPA - Suggestion 21 - Page 22. Concur - see amended mercury criteria.
53. EPA - Suggestion 22 - Page 22 - Concur - errors in the site specific formulae for silver and zinc were corrected.

54. Albuquerque - Suggestion 5 - Page 22, Silver Criteria. Comment is noted - no changes to the proposal were requested or made.
55. EPA - Suggestion 23.a. - Page 28. Concur - new table has been substituted.
56. EPA - Suggestion 23.b. - Page 29 - Concur - see new table.